

What is claimed is:

1. In an access network, a method for the communication of services to and from customer premises, comprising:
  - 5 transmitting services to said customer premises using a passive optical downstream link; and
  - receiving services from said customer premises using an active optical upstream link.
- 10 2. The method of claim 1, wherein a central office of said access network transmits services to said customer premises via said passive optical downstream link.
3. The method of claim 1, wherein said passive optical downstream link  
15 comprises a means for splitting optical signals.
4. The method of claim 3, wherein said means for splitting optical signals comprises an optical power splitter.
- 20 5. The method of claim 1, wherein a central office of said access network receives services from said customer premises via said active optical upstream link.
6. The method of claim 1, wherein said active optical upstream link  
25 comprises:
  - at least one receiver for receiving services from said customer premises intended for upstream transmission; and
  - at least one switch for aggregating and multiplexing upstream traffic.
- 30 7. The method of claim 6, wherein said active optical upstream link further comprises:

at least one transmitter for transmitting the aggregated services upstream.

8. An apparatus for the communication of services to and from customer premises in an access network, comprising:

a splitter for splitting downstream services intended for said customer premises;

at least one receiver for receiving services from said customer premises intended for upstream transmission; and

- at least one switch for aggregating and multiplexing upstream traffic.

9. The apparatus of claim 8, further comprising:

at least one transmitter for transmitting the aggregated services upstream.

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10. The apparatus of claim 8, wherein said splitter defines a passive optical path of said apparatus.

11. The apparatus of claim 10, wherein said passive optical path further comprises a repeater.

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12. The apparatus of claim 8, wherein said at least one receiver and said at least one switch define an active optical path of said apparatus.

13. The apparatus of claim 12, wherein said active optical path further comprises a transmitter.

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14. The apparatus of claim 8, wherein said splitter comprises a power splitter.

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15. The apparatus of claim 8, wherein said apparatus is located within a central office of an access network configured for point-to-point communication.

16. An apparatus for the communication of services to and from customer premises in an access network, comprising:
- a means for splitting downstream services intended for said customer premises;
  - at least one means for receiving services from said customer premises intended for upstream transmission; and
  - at least one means for aggregating and multiplexing upstream traffic.
17. The apparatus of claim 16, further comprising:
- at least one means for transmitting the aggregated services upstream.
18. A passive/active access network for the communication of services to and from customer premises, comprising:
- a central office;
  - at least one customer premise; and
  - an active/passive access unit for providing communication between said central office and said at least one customer premise, wherein services from said central office intended for said at least one customer premise are communicated to said at least one customer premise using a passive optical downstream link of said active/passive access unit and services from said at least one customer premise intended for said central office are communicated to said central office using an active optical upstream link of said active/passive access unit.
19. The passive/active access network of claim 18, wherein said passive optical downstream link of said active/passive access unit comprises a means for splitting services from said central office.
20. The passive/active access network of claim 18, wherein said active optical upstream link of said active/passive access unit comprises:

at least one means for receiving services from said at least one customer premise intended for said central office;

at least one means for aggregating and multiplexing upstream traffic; and

at least one means for transmitting the aggregated services upstream to  
5 said central office.